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## REMARKS

Claims 1-20 are amended to correct formality errors and to more clearly define the invention.

Independent claim 21 and dependent claim 22 are added.

Support for the amendments is found in the existing claims and in the Application description. Specifically, support for "using a selected predetermined individual control data file to identify an output file data element corresponding to a source file data element and to map said source file data element in said source data format to said identified corresponding output file data element in said second data format without user intervention" is found on page 11 lines 5-14 and in the previous example description concerning Tables 1-3 and other places. Support for "an indicator identifying repeating data elements associated with a common entity" is found in the application on page 4 lines 8-16.

*I. Rejection under 35 U.S.C. 102(b)*

Claims 1-6, 8-16, 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 6,151,702 – Overturf et al. These claims, as amended, are deemed to be patentable for the reasons given below.

Amended claim 1 recites a system "for transforming data of a first data structure to a different second data structure compatible with an executable application" comprising "a pre-processor for acquiring data element values from a first data structure and collating said acquired data element values into a source file having a source data format; a mapping processor for automatically mapping data element values in said source file having said source data format into an output file having a different second data format in response to a selected one of a plurality of predetermined control data files determining a corresponding plurality of different second data formats, said mapping processor automatically mapping data element values in said source file into an output file by using a selected predetermined individual control data file to identify an output file data element value corresponding to a source file data element value and to map said source file data element value in said source data format to said identified corresponding output file data element value in said second data format without user intervention; and an output processor for storing said output file for use by said application". These features are not shown (or

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suggested) in Overturf.

The system of claim 1 involves "automatically mapping data element values" in a "source file into an output file by using a selected predetermined individual control data file to identify an output file data element value corresponding to a source file data element value and to map said source file data element value in said source data format to said identified corresponding output file data element value in said second data format without user intervention". These features address the deficiencies of prior conversion methods requiring development efforts that are inherently ridged, expensive, and labor intensive (Application page 1 lines 24-25). The "invention overcomes the aforementioned drawbacks of the prior art proposals by providing a system and a method for software conversions". The system uses "standard reports and pre-defined translation templates" so that data may be converted "from one system's application" "easily, repeatedly and efficiently" using a "mapping" that "is **standardized** which decreases implementation time" (Application page 2 lines 12-22).

Overturf (as recognized in the Rejection on page 5 in connection with claim 7) does not show or suggest "**automatically mapping data element values**" in a "source file into an output file by using a selected predetermined individual control data file to **identify** an output file data element value corresponding to a source file data element value and to **map** said source file data element value in said source data format to said identified corresponding output file data element value in said second data format **without** user intervention". Rather Overturf converts Cobol language statements one statement at a time with user supervision of conversion of each individual statement. Overturf also fails to show or suggest "a pre-processor for acquiring data element values from a first data structure and collating said acquired data element values into a source file having a source data format". Overturf describes an "automated, **interactive** system and method for translating a software program on a source application system to a data **model** for input to a target application system which includes an information repository" (Overturf column 1 lines 20-24, column 5 lines 19-22).

Further, although Overturf refers to conversion of data items to Action diagrams (e.g., column 4 lines 21-23, lines 38-42, table column 4 lines 25-37), such data items are NOT data values but Cobol statements. Specifically, in Overturf, Cobol data items are code statements that are converted to Action diagram language statements. This is corroborated in Overturf in column 4 lines 38-42 ("the COBOL

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data items are isolated and extracted from the source program 9 and the resulting Action Diagram language statements generated”) also in table column 4 lines 25-37 (exemplifying Cobol file definition statements), Figure 17 and in the accompanying description in column 12 lines 3-5 (“this window allows the user to edit properties for a COBOL data item. This window is basically a template for the data definition of the data item”). This is a **fundamental difference**.

Overturf does NOT disclose “automatically ...using a **selected predetermined individual control data file** to identify an output file data element **value** corresponding to a source file data element value and to **map** said source file data element value in said source data format to said identified corresponding output file data element value in said second data format without user intervention”. Cobol (or other programming language) statements are NOT “data element values”. Overturf does not appear to discuss automatically mapping “data element values” at all and certainly not mapping of a “data element value” in a “source data format” to an “identified corresponding output file data element value” in a “second data format” without “user intervention”. The mapping of code statements from a first language to a different second language comprises a fundamentally different task to the task of data value conversion and involves, in the Overturf system, substantial user intervention. This is evident in Overturf column 5 lines 20-22, 26-28 (“the user initiates and controls the translation of statements in the source program 9 using translator 11”, “Any errors or problems which result in entries to the error list 13 are resolved interactively by the user”). Therefore, Overturf is incapable of “automatically” mapping a “data element value” in a “source data format” to a “corresponding output file data element value” in a “second data format” identified using an “individual control data file” without “user intervention”. Overturf is concerned with software conversion of individual statements from a first programming language to a different language (see column 2 lines 9-16). Consequently, withdrawal of the rejection of amended claim 1 under 35 USC 102(b) is respectfully requested.

Amended dependent claim 2 is considered to be patentable based on its dependence on claim 1. Claim 2 is also considered to be patentable because Overturf does not show (or suggest) use of a “selected predetermined control data file” that “does at least one of, (a) determine a **row column structure** for said output file second data format, b) identify source file and corresponding output file locations of particular data elements values to be mapped from said source file to said output file,

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and (c) identify a **row column structure** for said source file data format". These features are nowhere shown or suggested in Overturf.

Amended dependent claim 3 is considered to be patentable based on its dependence on claim 1. Claim 3 is also considered to be patentable because Overturf does not show (or suggest) a "pre-processor" that "acquires a control data element value of said individual control data file" used to "to identify an output file data element value corresponding to a source file data element value". Overturf also does not show (or suggest) a "pre-processor" that "acquires a control data element value of said individual control data file" from "said first data structure and provides said control data element value to said selected predetermined control data file". Column 4 lines 15-20 of Overturf describes "parser 7" that simply reads a Cobol file definition statement and fails to provide any mention or suggestion of acquiring "a control data element value of said individual control data file" used to "to identify an output file data element value corresponding to a source file data element value".

Amended dependent claim 4 is considered to be patentable based on its dependence on claim 1. Claim 4 is also considered to be patentable because Overturf does not show (or suggest) the feature combination involving a "pre-processor" that "parses data elements values of said first data structure to include some elements values in said source file and to exclude other element values from said source file in response to user entered data element value selection information".

Amended dependent claim 5 is considered to be patentable based on its dependence on claim 1. Claim 5 is also considered to be patentable because Overturf does not show (or suggest) "said predetermined individual control data file includes an indicator identifying **repeating data elements associated with a common entity** and said mapping processor uses said indicator in mapping said source file data element value in said source data format to said identified corresponding output file data element value in said second data format". This feature facilitates data format conversion and is not contemplated by Overturf because Overturf is concerned with source code conversion from one computer language to another and NOT the conversion of one data value from a first format to another different format.

Amended dependent claim 6 is considered to be patentable based on its dependence on claim 1. Claim 6 is also considered to be patentable because Overturf does not show (or suggest) "said **selected control data file** includes user entered information for directing said mapping of data element values in said source file to

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said output file, and said mapping processor acquires said user entered information in response to **prompting** user data entry". Overturf does not suggest use of such a "selected control data file" at all.

Amended dependent claim 8 is considered to be patentable based on its dependence on claim 1. Claim 8 is also considered to be patentable because Overturf does not show (or suggest) "said output file second data format comprises at least one of, (a) a comma separated file (CSF) or Flat file format, and (b) a data field size aligned file format". Overturf does not suggest such a feature combination for reasons given in connection with claim 1. Contrary to the Rejection statement on page 4, Overturf fails to disclose or mention a flat file in column 4 lines 57-60.

Amended dependent claim 9 is considered to be patentable based on its dependence on claims 1 and 7. Claim 9 is also considered to be patentable because Overturf does not show (or suggest) "a cross mapping processor for reading individual records including said mapped data element values and converting necessary data element values from said first data format into said second data format before outputting said second data format file to said output processor". Overturf does not suggest such a feature combination for reasons given in connection with claim 1. The cross-referencing system of Overturf in column 2 lines 37-42 relied on in the Rejection concerns associating application code statements NOT data values. Further, Overturf fails to suggest "a cross mapping processor for reading individual records including said mapped data element values and converting necessary data element values from said first data format into said second data format before outputting said second data format file to said output processor".

Amended dependent claim 10 is considered to be patentable based on its dependence on claims 1 and 9. Claim 10 is also considered to be patentable because Overturf does not show (or suggest) "before outputting said second data format file said cross mapping processor identifies errors in said necessary data element values and reports errors instead of outputting to said output processor". Overturf does not suggest such a feature combination for reasons given in connection with claim 1.

Amended independent claim 11 recites a "method for transforming data of a first data structure to a different second data structure compatible with an executable application, the activities of: acquiring data element values from a first data structure and collating said acquired data element values into a source file having

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a source data format; automatically mapping data element values in said source file having said source data format into an output file having a different second data format in response to a selected one of a plurality of predetermined control data files determining a corresponding plurality of different second data formats, by automatically mapping data element values in said source file into an output file by using a selected predetermined individual control data file to identify an output file data element value corresponding to a source file data element value and to map said source file data element value in said source data format to said identified corresponding output file data element value in said second data format without user intervention; and storing said output file for use by said application by an output processor”.

Amended method claim 11 mirrors system claim 1 and is considered to be patentable for the reasons given in connection with claim 1.

Dependent method claims 12-16 and 18-20 mirror system claims 2-6 and 8-10 and are considered to be patentable for similar reasons. Consequently, withdrawal of the rejection of claims 1-6, 8-16 and 18-20 under 35 USC 102(b) is respectfully requested.

## *II. Rejection under 35 U.S.C. 103(a)*

Claims 7 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,151,702 – Overturf et al. in view of U.S. Patent 5,694,578 – Upson et al. These claims, as amended, are considered to be patentable for reasons given in connection with claim 1 and for the following reasons.

Amended dependent claim 7 is considered to be patentable based on its dependence on claim 1. Claim 7 is also considered to be patentable because Overturf with Upson does not show (or suggest) “said plurality of predetermined control data files represent a plurality of **predetermined mapping templates** for automatically identifying output file data element values corresponding to source file data element values and for mapping said source file data element values in a selected one of a plurality of corresponding different source data formats to said identified corresponding output file data element values in a selected one of a plurality of corresponding different second data formats, **without user intervention**”. As recognized in the Rejection on page 5 Overturf does not show or suggest “**automatically mapping data element values**” in a “source file into an output file by

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using a selected predetermined individual control data file to **identify** an output file data element value corresponding to a source file data element value and to **map** said source file data element value in said source data format to said identified corresponding output file data element value in said second data format **without** user intervention". Also, contrary to the Rejection statement on page 5, Overturf and Upson individually or in combination fail to show or suggest such features.

Upson (with Overturf) describes a substantially **manually** controlled "conversion system" that "allows a **user** to convert data in a given structure into a desired data structure. Initially, the **user** constructs a visual graphical input template that describes the structure of the input data to the present invention...Thereafter, the **user** constructs a visual graphical output template which describes the desired structure of the output data. Finally, the **user** describes the manner in which the output data structure is to be constructed from the input data structure. Such a description is accomplished by selecting pieces of the input data template and "'assigning" those pieces to the corresponding pieces of the output template" (Upson column 4 lines 35-53). The Upson system is wholly user directed and controlled. For data conversion a user assigns "pieces of the input data template" to "the corresponding pieces of the output template". Upson Figure 10 illustrates a user assignment of input template elements to output template elements for a particular conversion. Upson (with Overturf) does not show or suggest "**automatically identifying** output file data element **values** corresponding to source file data element **values**". The Upson (with Overturf) process is manual NOT automatic.

Upson (with Overturf) also fails to show or suggest using "a plurality of predetermined control data files" that "represent a plurality of **predetermined mapping templates**" for automatically "mapping said source file data element values in a selected one of a **plurality** of corresponding different source data formats to said identified corresponding output file data element values in a selected one of a **plurality** of corresponding different second data formats, **without user intervention**". The Upson system discloses a system supporting **single user driven** data format conversion and NOT an automatic conversion of data in one of a plurality of different formats to one of a plurality of different output formats using one of a plurality of predetermined mapping templates". In the Upson system, a "user constructs a visual graphical output template which describes the desired structure of the output data. Finally, the user describes the manner in which the output data structure is to be constructed from the input data structure" (Upson column 4 lines 43-45). Further, the Upson system requires that a "user constructs a visual graphical

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output template which describes the desired structure of the output data" and "describes the manner in which the output data structure is to be constructed from the input data structure" for an individual **single** type of conversion. In contrast, in the claimed system a "selected predetermined individual control data file" is used "to identify an output file data element value corresponding to a source file data element value and to map said source file data element value in said source data format to said identified corresponding output file data element value in said second data format **without user intervention**". This capability of selecting and automatically performing a selectable type of format conversion from multiple different types using a selected one of a "**plurality of predetermined mapping templates**" is not contemplated in Upson or Overturf alone or together.

The incorporation of the Upson features in the Overturf system as suggested in the Rejection results in a system for converting programming language code statement one by one (under user interactive supervision and control) in a first language to a code statement in a different second language by employing a user constructed assignment template. In contrast, the claimed system addresses providing "standard reports and pre-defined translation templates" so that data may be converted "from one system's application" "easily, repeatedly and efficiently" using a "mapping" that "is **standardized** which decreases implementation time" (Application page 2 lines 12-22). There is no specific problem recognition, other motivation or reason for Overturf with Upson to incorporate the claimed features. On the contrary both Overturf and Upson are substantially user driven and fail to recognize the need for "mapping" that "is **standardized** which decreases implementation time". Therefore, withdrawal of the rejection of claim 7 under 35 USC 103(a) is respectfully requested.

Amended method claim 17 mirrors system claim 7 and is considered to be patentable for the reasons given in connection with claim 7.

Added claim 21 is deemed to be patentable for reasons given in connection with claims 1 and 5.

Added claim 22 is deemed to be patentable for reasons given in connection with claim 1.



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In view of the above amendments and remarks, Applicants submit that the Application is in condition for allowance, and favorable reconsideration is requested.

Respectfully submitted,



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